

Weekly Report 12/01/2013

Summary

There are only two weekdays in this Thanks-giving week, so there is no work on VASA project. For the data cleaning project, I had a startup of the system, uploading multiple data files, displaying editable tables. And I read a paper on relational data display.

The VASA project

No VASA work.

The data cleaning project

With Django web framework, the system is now able to read and save data files uploaded. Further support for remembering each editing step requires dynamic model of the underlying data. I'm still working on implementing it.

Eirik Bakke, David R. Karger, and Robert C. Miller. "Automatic Layout of Structured Hierarchical Reports." Visualization and Computer Graphics, IEEE Transactions on 19.12 (2013): 2586-2595.

This paper describes a relational data layout algorithm which combines the advantage of outline layout and nested layout to make tabular display more space efficient and readable. To improve readability, the layout algorithm is horizontally constrained, which display compound field as nested table as long as there is enough horizontal space.

It is also a way to manage multi-relational data because for compound field such as "Sections" in the figure, it itself makes a schema.

(d) Hybrid layout with justified tables

Course Listings	Dept. Number								
	GEO 207								
	AST 207								
Title	A Guided Tour of the Solar System								
Description	This course examines the major bodies of our solar system, emphasizing their surface features, internal structures, and atmospheres. Topics include the origin of the solar system, habitability of planets, and role of impacts in planetary evolution. Terrestrial and giant planets will be studied as well as satellites, comets, and asteroids. Recent discoveries from planetary missions are emphasized. The course is aimed primarily at non-science majors.								
Max. Enrollment	140								
May Audit?	Y								
Website									
Final Exam Type	Final								
Grading	Title	Perc.							
	MidTerm Exam	20							
	Quizzes	10							
	Final Exam	20							
	Precept Participation	10							
	Other Exam	20							
	Problem Set(s)	20							
Sample Reading List	Author Name	Title							
	Morrow and Owen	The Planetary System							
	Bennett et al.	The Cosmic Perspective							
	Consolmagno and Schaefer	Worlds Apart: A Textbook in Planetary Science							
	Beatty et al.	The New Solar System							
Sections	Format	Number	Meetings		Instructors				
			Beg. Time	End Time	Place	Days	First	Middle	Last
	L	01	11:00:00	11:50:00	GUYOT 10	M W F	Thomas	S.	Duffy
	P	01	13:30:00	14:20:00	GUYOT 155	T	Thomas Nicole Mark	S. K A.	Duffy Golberg Miller
	P	03	15:30:00	16:20:00	GUYOT 154	W	Thomas Nicole Mark	S. K A.	Duffy Golberg Miller
	P	04	19:00:00	19:50:00	GUYOT 154	W	Nicole Mark Nicole	K A. K.	Golberg Miller Golberg
	P	05	11:00:00	11:50:00	GUYOT 154	Th	Mark Nicole Mark	A. K A.	Miller Golberg Miller

Future Work

1. More papers reading
2. More data cleaning project